



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,888	09/25/2003	JoAnne J. Fillatti	16518.133	4299

28381 7590 03/15/2006

ARNOLD & PORTER LLP
ATTN: IP DOCKETING DEPT.
555 TWELFTH STREET, N.W.
WASHINGTON, DC 20004-1206

EXAMINER

COLLINS, CYNTHIA E

ART UNIT PAPER NUMBER

1638

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/669,888	Applicant(s) FILLATTI ET AL.	
	Examiner Cynthia Collins	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on September 25, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-74 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 2-6, 23, 25-27 and 29-30, drawn to a soybean seed of claim 1 comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, and a transformed soybean plant bearing seed, classified in class 800, subclass 312.
- II. Claims 2-6, 23, 25-27 and 29-30, drawn to a soybean seed of claim 1 comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, and a transformed soybean plant bearing seed, classified in class 800, subclass 312.
- III. Claims 2-6, 23, 25-27 and 29-30, drawn to a soybean seed comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the

endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, and a transformed soybean plant bearing seed, classified in class 800, subclass 312.

- IV. Claims 2-6, 27 and 29-30, drawn to a soybean seed comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, and a transformed soybean plant, classified in class 800, subclass 312.
- V. Claims 2-6, 27 and 29-30, drawn to a soybean seed comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, and a transformed soybean plant, classified in class 800, subclass 312.
- VI. Claims 2-6, 27 and 29-30, drawn to a soybean seed comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous

expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, and a transformed soybean plant, classified in class 800, subclass 312.

- VII. Claims 2-6, 27 and 29-30, drawn to a soybean seed comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, and a transformed soybean plant, classified in class 800, subclass 312.
- VIII. Claims 2-6, 27 and 29-30, drawn to a soybean seed comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, and a transformed soybean plant, classified in class 800, subclass 312.
- IX. Claims 2-6, 27 and 29-30, drawn to a soybean seed comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set

Art Unit: 1638

of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, and a transformed soybean plant, classified in class 800, subclass 312.

X-XVIII. Claim 7, drawn to oil derived from the soybean seed of claim 2, classified in class 426, subclass 601. Groups X-XVIII are directed to oil derived from the soybean seed of claim 2 as defined in Groups I-IX respectively.

XIX-XXVII. Claim 8, drawn to meal derived from the soybean seed of claim 2, classified in class 426, subclass 550. Groups XIX-XXVII are directed to meal derived from the soybean seed of claim 2 as defined in Groups I-IX respectively.

XXVIII. Claim 9, drawn to a container of soybean seeds, wherein at least 25% of the seeds exhibit an oil composition comprising 55 to 80% by weight oleic acid, 10 to 40% by weight linoleic acid, 6% or less by weight linolenic acid, and 2 to 8% by weight saturated fatty acids, classified in class 800, subclass 312.

XXIX. Claim 11, drawn to a soybean seed of claim 10 exhibiting an oil composition that further comprises 10 to 29% by weight linoleic acid, 4.5% or less by weight linolenic acid, and 3 to 6% by weight saturated fatty acids, classified in class 800, subclass 312.

XXX. Claim 12, drawn to a soybean seed of claim 10 exhibiting an oil composition that further comprises 10 to 29% by weight linoleic acid, 3.0% or less by weight linolenic acid, and 2 to 3.6% by weight saturated fatty acids, classified in class 800, subclass 312.

Art Unit: 1638

XXXI. Claims 13-17, drawn to a crude soybean oil exhibiting an oil composition

comprising 55 to 80% by weight oleic acid, 10 to 40% by weight linoleic acid, 6% or less by weight linolenic acid, and 2 to 8% by weight saturated fatty acids, classified in class 426, subclass 601.

XXXII. Claim 18, drawn to a crude soybean oil exhibiting an oil composition

comprising 65 to 80% by weight oleic acid, 10 to 40% by weight linoleic acid, 6% or less by weight linolenic acid, and 2 to 8% by weight saturated fatty acids, classified in class 426, subclass 601.

XXXIII. Claims 19-21, drawn to a crude soybean oil exhibiting an oil composition

comprising 69 to 73% by weight oleic acid, 21 to 24% by weight linoleic acid, 0.5 to 3% by weight linolenic acid, and 2 to 3% by weight saturated fatty acids, classified in class 426, subclass 601.

XXXIV-XLII. Claim 24, drawn to feedstock derived from the transformed plant of claim

23, classified in class 426, subclass 630. Groups XXXIV-42 are directed to feedstock derived from the transformed plant of claim 23 as defined in Groups I-IX respectively.

XLIII. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising

a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of

increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 800, subclass 306, for example.

XLIV. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 800, subclass 306, for example.

XLV. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 800, subclass 306, for example.

XLVI. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of

increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 800, subclass 306, for example.

XLVII. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 800, subclass 306, for example.

XLVIII. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 800, subclass 306, for example.

XLIX. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of

increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 800, subclass 306, for example.

- L. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 800, subclass 306, for example.
- LI. Claims 27-28 and 30, drawn to a transformed temperate oilseed plant comprising a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 800, subclass 306, for example.
- LII. Claims 31-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the

endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 800, subclass 281.

- LIII. Claims 31-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 800, subclass 281.
- LIV. Claims 31-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 800, subclass 281.
- LV. Claims 31 and 33-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of

increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 800, subclass 281.

LVI. Claims 31 and 33-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 800, subclass 281.

LVII. Claims 31 and 33-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 800, subclass 281.

LVIII. Claims 31 and 33-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of

increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 800, subclass 281.

LVIX. Claims 31 and 33-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 800, subclass 281.

LX. Claims 31 and 33-38, drawn to a method of transforming a plant cell with a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 800, subclass 281.

LXI. Claims 39, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least

one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 435, subclass 320.1.

LXII. Claims 39, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 435, subclass 320.1.

LXIII. Claims 39, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 435, subclass 320.1.

LXIV. Claims 39, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD3 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, classified in class 435, subclass 320.1.

- LXV. Claims 39, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD3 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, classified in class 435, subclass 320.1.
- LXVI. Claims 39, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD3 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, classified in class 435, subclass 320.1.
- LXVII. Claims 40-42, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, wherein the first set of DNA sequences is expressed as a sense cosuppression RNA transcript or transcripts, classified in class 435, subclass 320.1.

LXVIII. Claims 40-42, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, wherein the first set of DNA sequences is expressed as a sense cosuppression RNA transcript or transcripts, classified in class 435, subclass 320.1.

LXIX. Claims 40-42, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, wherein the first set of DNA sequences is expressed as a sense cosuppression RNA transcript or transcripts, classified in class 435, subclass 320.1.

LXX. Claims 40, 43-44, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the

endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, wherein the first set of DNA sequences is expressed as an antisense RNA transcript or transcripts, classified in class 435, subclass 320.1.

LXXI. Claims 40, 43-44, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, wherein the first set of DNA sequences is expressed as an antisense RNA transcript or transcripts, classified in class 435, subclass 320.1.

LXXII. Claims 40, 43-44, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, wherein the first set of DNA sequences is expressed as an antisense RNA transcript or transcripts, classified in class 435, subclass 320.1.

LXXIII. Claims 40, 45, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at

least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, wherein the first set of DNA sequences is expressed as an RNA transcript capable of forming a single double-stranded RNA molecule, classified in class 435, subclass 320.1.

LXXIV. Claims 40, 45, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, wherein the first set of DNA sequences is expressed as an RNA transcript capable of forming a single double-stranded RNA molecule, classified in class 435, subclass 320.1.

LXXV. Claims 40, 45, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, wherein the first set of DNA sequences is expressed as an RNA transcript capable

of forming a single double-stranded RNA molecule, classified in class 435, subclass 320.1.

LXXVI. Claims 46-50, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, and further comprising a third non-coding sequence that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FAD3-1B gene, classified in class 435, subclass 320.1.

LXXVII. Claims 46-50, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, and further comprising a third non-coding sequence that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FAD3-1B gene, classified in class 435, subclass 320.1.

LXXVIII. Claims 46-50, 53-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable,

Art Unit: 1638

when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, and further comprising a third non-coding sequence that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FAD3-1B gene, classified in class 435, subclass 320.1.

LXXIX. Claims 51-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, and further comprising a third non-coding sequence that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FATB gene, classified in class 435, subclass 320.1.

LXXX. Claims 51-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, and further

comprising a third non-coding sequence that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FATB gene, classified in class 435, subclass 320.1.

LXXXI. Claims 51-54 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3-1A genes, a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, and further comprising a third non-coding sequence that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FATB gene, classified in class 435, subclass 320.1.

LXXXII. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase I gene and a beta-ketoacyl-ACP synthase IV gene, classified in class 435, subclass 320.1.

LXXXIII. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two

genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase I gene and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

LXXXIV. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase IV gene and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

LXXXV. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase I gene and a beta-ketoacyl-ACP synthase IV gene, classified in class 435, subclass 320.1.

LXXXVI. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is

capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase I gene and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

LXXXVII. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase IV gene and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

LXXXVIII. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase I gene and a beta-ketoacyl-ACP synthase IV gene, classified in class 435, subclass 320.1.

LXXXIX. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression

of at least two genes that are a beta-ketoacyl-ACP synthase I gene and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

XC. Claims 53-55 and 57-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least two genes that are a beta-ketoacyl-ACP synthase IV gene and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

XCI. Claims 53-54 and 56-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of a beta-ketoacyl-ACP synthase I gene, a beta-ketoacyl-ACP synthase IV gene, and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

XCII. Claims 53-54 and 56-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of a beta-

ketoacyl-ACP synthase I gene, a beta-ketoacyl-ACP synthase IV gene, and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

XCIII. Claims 53-54 and 56-58, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of a beta-ketoacyl-ACP synthase I gene, a beta-ketoacyl-ACP synthase IV gene, and a delta-9 desaturase gene, classified in class 435, subclass 320.1.

XCIV. Claims 59-66, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, wherein said first set of DNA sequences comprises a first non-coding sequence that expresses a first sequence that exhibits at least 90% identity to a non-coding region of a FAD2 gene, a first antisense sequence that expresses a first antisense RNA sequence capable of forming a double-stranded RNA molecule with a first RNA sequence, a second non-coding sequence that expresses a second RNA sequence that exhibits at least 90% identity to a non-coding region of a FAD3 gene, and a second antisense

RNA capable of forming a double-stranded RNA molecule with a second RNA sequence, classified in class 435, subclass 320.1.

XCV. Claims 59-66, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, wherein said first set of DNA sequences comprises a first non-coding sequence that expresses a first sequence that exhibits at least 90% identity to a non-coding region of a FAD2 gene, a first antisense sequence that expresses a first antisense RNA sequence capable of forming a double-stranded RNA molecule with a first RNA sequence, a second non-coding sequence that expresses a second RNA sequence that exhibits at least 90% identity to a non-coding region of a FAD3 gene, and a second antisense RNA capable of forming a double-stranded RNA molecule with a second RNA sequence, classified in class 435, subclass 320.1.

XCVI. Claims 59-66, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, wherein said first set of DNA sequences

Art Unit: 1638

comprises a first non-coding sequence that expresses a first sequence that exhibits at least 90% identity to a non-coding region of a FAD2 gene, a first antisense sequence that expresses a first antisense RNA sequence capable of forming a double-stranded RNA molecule with a first RNA sequence, a second non-coding sequence that expresses a second RNA sequence that exhibits at least 90% identity to a non-coding region of a FAD3 gene, and a second antisense RNA capable of forming a double-stranded RNA molecule with a second RNA sequence, classified in class 435, subclass 320.1.

XCVII. Claim 67, drawn to a recombinant nucleic acid molecule of claim 59, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, wherein said first set of DNA sequences further comprises a third non-coding sequence that expresses a third RNA sequence that exhibits at least 90% identity to a non-coding region of a FAD3-1B gene, and a third antisense sequence that expresses a third antisense RNA sequence capable of forming a double-stranded RNA molecule with the third RNA sequence, classified in class 435, subclass 320.1.

XCVIII. Claim 67, drawn to a recombinant nucleic acid molecule of claim 59, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that

are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, wherein said first set of DNA sequences further comprises a third non-coding sequence that expresses a third RNA sequence that exhibits at least 90% identity to a non-coding region of a FAD3-1B gene, and a third antisense sequence that expresses a third antisense RNA sequence capable of forming a double-stranded RNA molecule with the third RNA sequence, classified in class 435, subclass 320.1.

XCIX. Claim 67, drawn to a recombinant nucleic acid molecule of claim 59, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, wherein said first set of DNA sequences further comprises a third non-coding sequence that expresses a third RNA sequence that exhibits at least 90% identity to a non-coding region of a FAD3-1B gene, and a third antisense sequence that expresses a third antisense RNA sequence capable of forming a double-stranded RNA molecule with the third RNA sequence, classified in class 435, subclass 320.1.

C. Claims 68-69, drawn to a recombinant nucleic acid molecule of claim 59, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that

Art Unit: 1638

are FAD2 and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase I gene, further comprising a third non-coding sequence that is capable of expressing a third RNA sequence that exhibits at least 90% identity to a non-coding region of a FATB gene, and a third antisense sequence that is capable of expressing a third antisense RNA sequence capable of forming a double-stranded RNA molecule with the third RNA sequence, classified in class 435, subclass 320.1.

CI. Claims 68-69, drawn to a recombinant nucleic acid molecule of claim 59, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that are FAD2 and FATB genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a beta-ketoacyl-ACP synthase IV gene, further comprising a third non-coding sequence that is capable of expressing a third RNA sequence that exhibits at least 90% identity to a non-coding region of a FATB gene, and a third antisense sequence that is capable of expressing a third antisense RNA sequence capable of forming a double-stranded RNA molecule with the third RNA sequence, classified in class 435, subclass 320.1.

CII. Claims 68-69, drawn to a recombinant nucleic acid molecule of claim 59, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of at least two genes that

are FATB and FAD3 genes, and a second set of DNA sequences that is capable, when expressed in a host cell, of increasing the endogenous expression of at least one gene that is a delta-9 desaturase gene, further comprising a third non-coding sequence that is capable of expressing a third RNA sequence that exhibits at least 90% identity to a non-coding region of a FATB gene, and a third antisense sequence that is capable of expressing a third antisense RNA sequence capable of forming a double-stranded RNA molecule with the third RNA sequence, classified in class 435, subclass 320.1.

CIII. Claims 70-72, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FAD2 gene and a FAD3 gene, and a second set of DNA sequences that comprises a first coding sequence that is capable of expressing a CP4 EPSPS gene, and a second coding sequence that is capable, when expressed, of increasing the endogenous expression of a beta-ketoacyl-ACP synthase I gene, classified in class 435, subclass 320.1.

CIV. Claims 70-72, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FAD2 gene and a FAD3 gene, and a second set of DNA sequences that comprises a first coding sequence that is capable of expressing a CP4 EPSPS gene, and a second coding sequence that is capable, when expressed, of increasing the endogenous expression of a beta-ketoacyl-ACP synthase IV gene, classified in class 435, subclass 320.1.

Art Unit: 1638

- CV. Claims 70-72, drawn to a recombinant nucleic acid molecule, said molecule comprising a first set of DNA sequences that is capable, when expressed in a host cell, of suppressing the endogenous expression of a FAD2 gene and a FAD3 gene, and a second set of DNA sequences that comprises a first coding sequence that is capable of expressing a CP4 EPSPS gene, and a second coding sequence that is capable, when expressed, of increasing the endogenous expression of a delta-9 desaturase gene, classified in class 435, subclass 320.1.
- CVI. Claim 73, drawn to a nucleic acid molecule comprising a nucleic acid sequence, classified in class 435, subclass 320.1.
- CVII. Claim 74, drawn to a nucleic acid molecule comprising a nucleic acid sequence, classified in class 435, subclass 320.1.

For inventions LXXVI-LXXVIII above, restriction to a single FAD2-1A sequence, a single FAD3-1A sequence and a single FAD3-1B sequence is also required under 35 USC 121.

Therefore, if any of inventions LXXVI-LXXVIII is elected, a single FAD2-1A sequence, a single FAD3-1A sequence and a single FAD3-1B sequence must also be elected.

For inventions LXXIX-LXXXI and C-CII above, restriction to a single FATB sequence is also required under 35 USC 121. Therefore, if any of inventions LXXIX-LXXXI and C-CII is elected, a single FATB sequence must also be elected.

Art Unit: 1638

For inventions XCIV-XCVI above, restriction to a single FAD2 sequence, a single FAD3 sequence, and a single spliceable intron sequence is also required under 35 USC 121. Therefore, if any of inventions XCIV-XCVI is elected, a single FAD2 sequence, a single FAD3 sequence, and a single spliceable intron sequence must also be elected.

For inventions LXXIX-LXXXI and C-CII above, restriction to a single FATB sequence is also required under 35 USC 121. Therefore, if any of inventions LXXIX-LXXXI and C-CII is elected, a single FATB sequence must also be elected.

For inventions CVI-CVII above, restriction to a single nucleic acid sequence is also required under 35 USC 121. Therefore, if any of inventions CVI-CVII is elected, a single nucleic acid sequence must also be elected.

Applicants are reminded that different nucleotide sequences are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute **independent and distinct** inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq. This requirement is not to be construed as a requirement for an election of species, since each sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.

Art Unit: 1638

Claim 1 link(s) inventions I-IX. Claim 10 link(s) inventions XXIX-XXX. Claim 22 link(s) inventions I-III. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim(s), claims 1, 10 and 22. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104. Claims that require all the limitations of an allowable linking claim will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim(s) including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. In re Ziegler, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-LI and LXI-CVII are distinct inventions. The transgenic plants cells and seed of inventions I-IX, XXVIII-XXX and XLIII-LI differ from one another in the type of nucleic acid molecule they comprise and in their oil composition. The oils of inventions X-XVIII and XXXI-XXXIII differ from one another in source and composition. The meals of inventions

Art Unit: 1638

XIX-XXVII differ from one another in source and composition. The feedstocks of inventions XXXIV-XLII differ from one another in source and composition. The nucleic acid molecules of inventions LXI-CVII differ from one another in primary sequence, nature of components and their arrangement, and in the function and/or mechanics of operation. The transgenic plants cells and seed of inventions I-IX, XXVIII-XXX and XLIII-LI, oils of inventions X-XXVIII and XXXI-XXXIII, meals of inventions XIX-XXVII, feedstocks of inventions XXXIV-XLII, and nucleic acid molecules of inventions LXI-CVII differ from each another in structure, function, use and classification.

Inventions LII-LX are distinct inventions. The methods of inventions LII-LX require the use of different materials and result in the production of different products.

Inventions X-XXVII and XXXI-XLII and inventions LII-LX are distinct inventions. The methods of inventions LII-LX do not require the use of or result in the production of the products of inventions X-XXVII and XXXI-XLII.

Inventions LII-LX and inventions I-IX, XXVIII-XXX and XLIII-LI are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the transgenic plants cells and seed can be made by another and materially different process, such as by cotransformation using individual sequences on separate vectors, sequential transformation using individual sequences on separate vectors, a single transformation using multiple sequences on a single vector, single transformation using single sequences on single vectors followed by crossing transgenic plants,

Art Unit: 1638

transgenic breeding, isolation of a transgenic cell from a transgenic plant, or regeneration of transgenic cells obtained from a transgenic plant.

Inventions LXI-CVII and inventions LII-LX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the nucleic acid molecules can be used in a materially different process of using that product, such as a hybridization method.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, their recognized divergent subject matter, and the requirement for different areas of search, restriction for examination purposes as indicated is proper.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Art Unit: 1638

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and

Art Unit: 1638

specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (571) 272-0794. The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1638

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cynthia Collins
Primary Examiner
Art Unit 1638

CC


3/7/06